But Mr. Calhoun's speculations have already led us farther than we have been accustomed to venture into the discussion of the party politics of the hour. We return to his volume, however, only for the purpose of taking leave of it with an expression of sincere respect for the frankness and ability with which it is written, and for the honesty of the author's purposes, however we may dissent from many of his opinions. We have not even noticed his elaborate argument for the Constitutionality of the doctrine, that every State has the right of interposing an absolute negative upon the proceedings of Congress. It implies no disrespect to his memory to say, that the time for this discussion is past, and that the question has been definitively settled against him. What he could not accomplish when contending, with the whole vigor of his intellect and the great weight of his character, in his favorite arena, the Senate, before a tribunal composed exclusively of representatives of the States, certainly cannot be effected by a posthumous publication, which men may read, though they may not care to answer. The doctrine of Nullification is buried in the grave of its most illustrious defender.

ART. IX. — *Remarks on the Production of the Precious Metals, and on the Depreciation of Gold.* By M. MICHEL CHEVALIER, Member of the Institute of France, &c. Translated by D. FORBES CAMPBELL, Esq. London: Smith, Elder, & Co. 1853. 8vo. pp. 117.

M. CHEVALIER stands at the head of the political economists of France. He is eminent not only for his thorough knowledge of the theory of the science, but for his familiarity with statistical details, and for the successful manner in which he has applied them to the elucidation and proof of the leading doctrines of political economy. It was, indeed, as a statistical writer that he first became distinguished, and gained the high honor of membership of the French Institute. His work upon the resources of this country, in particular, is an

excellent repertory of carefully observed and well digested facts, which, with the conclusions founded upon them, may yet be studied with interest and profit by the scientific inquirer. During the saturnalia of opinion and action which followed the outbreak of the Revolution of 1848, his writings did much to calm the public mind, and to refute those heresies of Louis Blanc, Proudhon, and others, in economical and political science, which, under the terrible excitement of that epoch, seemed about to plunge the whole country into anarchy and ruin. His demonstration of the folly and wickedness of the theories of these persons, and of the various schemes of Communistic and Socialist philosophy, preceded the decisive refutation of them which soon followed from actual experiment. His opinions, therefore, upon any subject falling within the range of his peculiar studies, are entitled to be received with much respect.

In common with other political economists and statisticians, the attention of M. Chevalier has been specially turned to the great problem which now so deeply interests the whole commercial world, — the probable effect of the immense increase in the annual supply of gold which has proceeded from the discoveries in California and Australia. He is preparing a work upon the subject, and the pamphlet now before us is a translation of a portion of it, which he furnished in manuscript to a friend in London. The translator, himself no mean authority upon such a point, has judiciously added to this fragment two very able and elaborate articles upon the subject, that were published eight or nine months ago in The Times newspaper, and some useful tables in farther illustration of it that appeared in the same journal. It is gratifying to find, that the facts adduced and the opinions expressed by M. Chevalier coincide, in the main, with those which were published in this Review six months since. We recur to the subject at present, not for the purpose of exploring the ground anew, but to give a brief abstract of the views of this eminent economist, and such extracts from his work as tend to corroborate the statements made on the former occasion.

The general conclusion of M. Chevalier is well stated by his translator, — "namely, *that the supplies of gold now pouring*

into Europe must, at an early period, occasion an immense rise in the price of all commodities," or, what is the same thing, a great decline in the value of money. The change is already visible to some extent, though the enhancement of prices hitherto certainly has not kept pace with the increasing abundance of gold. But as soon as the effect becomes strongly marked in the prices of the necessaries of life, "we may expect to see the public suddenly push the advance in prices as much above the point warranted by the augmented supplies of gold, as these prices are now, in my opinion, below that point." There will be an excitement, perhaps a panic, such as naturally arises when the people suddenly learn that they are in the midst of a revolution of unparalleled magnitude in a matter that most nearly concerns their commercial undertakings and their fortunes. But the panic will subside, and the world will slowly come to recognize the fact, supported by indubitable evidence, that the revolution will be for good and not for evil, that it will be uniform and diffused through a long period of years, and that these will be years, on the whole, of increasing industry, enterprise, and prosperity. The opinion that the depreciation will be a benefit to the whole community, is not expressed by M. Chevalier so decidedly as we could wish. Yet he has no gloomy forebodings in relation to it, and he admits enough to prove that he does not regard it as a public calamity. In the first place, he says, "a fall in the value of gold, like that of any other commodity, and *viewed as such*, is a decided benefit; because every commodity that falls in price becomes thereby more accessible, or rather less inaccessible, to the bulk of mankind." So far, however, as gold performs the functions of a standard of value, the change must be injurious to a portion of the community, whose income will no longer bear so high a proportion to their wants. While their income, nominally, will remain the same, it will not suffice to purchase so many of the comforts and luxuries of life as it does at present. Yet in respect to the whole community, the *direct* loss and gain will be exactly balanced; whatever one person may *lose* by the derangement of prices and existing contracts, others must *gain* to the same extent. In this democratic country, also, we may be permitted to con-

sider it as an advantage, that the gain will be very widely diffused — will be shared by the great bulk of the community; while the corresponding loss will fall upon a comparatively small number, and upon those who are best able to bear it. The great inequality in the distribution of wealth is the most frightful social evil that civilized man has to contend with, — an evil which is felt more keenly, because all the remedies which theorists have proposed for it, looking, as they always do, to some infraction of the right of property, would unquestionably tend to an aggravation of the disease. But when human wisdom is most at fault, God's moral government of the world is most effectually vindicated. Who could have foreseen that a famine of unprecedented severity, and the compulsory expatriation of one half of the people of Ireland, would be the means, in the long run, of effecting the regeneration of that unhappy country? Yet who can doubt, after the experience of the last five years, that such will be the ultimate result? In like manner, the discovery of immense deposits of gold in California and Australia is fast relieving Great Britain of her superfluous population, and raising the price of labor, while the effect of that gold upon the prices of all merchantable articles promises to alleviate the burdens of the indebted classes, to lessen the pressure of taxation, and to counteract the inordinate aggregation of the goods of this life in the hands of a few, to a greater extent than the most sanguine philanthropist, till recently, ever dreamed of. The same cause is also operating, and will long continue to operate, as a most effective stimulus to industry and enterprise throughout the world; and this good will not be offset by any corresponding evil.

But we return to the question which is first in order, whether the present influx of gold will cause a certain and early decline in the value of money. M. Chevalier considers at some length the arguments of those who still maintain that any important variation in the exchangeable value of gold is beyond the range of probabilities. These persons insist chiefly on the new and vast outlets which are preparing for the increased supply of gold; on the fact that several nations are now, for the first time, adopting gold as the basis of their currency; on

the rapid increase of population which results from the long continuance of the peace of nations, and on the consequent enlarged demand for coin; on the new colonies formed in the gold-bearing regions themselves, where, for a time at least, a metallic currency will be exclusively used; on the rapidly advancing civilization of Russia and Turkey, and the new demand thus created for coin and for articles of luxury, in the production of which gold is consumed; and on the general progress of mankind, the advancement of wealth, and the illimitable extension of human desires. M. Chevalier admits the presence of all these countervailing causes, and even indicates others, which, he thinks, have escaped notice. Foremost among these is the fact that, as rapidly as the coin is depreciated, more gold is required to be used as coin. It is usually computed, that the metallic currency of Great Britain and Ireland amounts to 60 millions sterling, or about 300 millions of dollars. If this consisted exclusively of gold, its weight would be about 1,176,470 pounds troy. Now suppose a fall of one third to take place in the value of the metal; then the quantity required to effect the same number of exchanges as before would be half as much again, or 1,764,705 pounds troy, being an addition of 588,235 pounds for Great Britain alone. The whole world would require at least ten times as much, or somewhat less than six millions of pounds troy. The whole annual product of California and Australia, taken together, probably does not exceed, as yet, 30 millions of pounds sterling, or about the sum necessary for effecting this reduction in Great Britain alone; so that ten years must elapse before the value of gold can be depreciated to this extent all over the earth, even if the annual product should all be coined into money, — a supposition which is far from being correct. The annual depreciation, therefore, can hardly exceed one thirtieth, or a little more than three per cent. The depreciation must be very gradual, then, but in spite of these counteracting causes, it is inevitable.

"Does it follow, in sound logic, from the above and other facts, which are put forward for the purpose of making any serious fall in the value of gold appear highly improbable — does it, we say, really follow, that gold will remain stationary, or nearly so, even on the supposition, (for, after all, we are dealing with a conjecture, though that

conjecture is every day approaching nearer to a certainty,) that the production will attain, or rather, will maintain, for many years to come, much higher proportions than before the recent discoveries? I confess that I can discover, in all the arguments advanced, nothing more than grounds for anticipating *delay*, or slackened progress, in the depreciation. Nay, I am of opinion, that this delay, or slackened progress, must, *ere long*, cease. Let us examine consecutively the different reasons that have been put forward.

"The United States of America, as well as Russia, we are told, are coining, or storing in their vaults, as security for their paper circulation, large quantities of gold coin. Nothing is more true as regards late years; but for the very reason that this drain has been in operation for a considerable time, it is not destined to be of much longer continuance. If one milliard of francs (forty millions sterling) in gold amply suffices for the monetary wants of England, we may conclude that, for the present, less than one milliard suffices for the United States, because, in the latter country, the practice of private individuals keeping on hand a supply of specie is even more unusual than it is in England. Banking accounts current, which greatly economize the use of coin, are there universally adopted, even in the villages. It must be remarked, too, that, in the United States, bank-notes replace specie, even more extensively than they do in England, inasmuch as the Americans have bank-notes for five dollars in all the States of the Union, and for a still lower denomination, in certain States, and it would be next to impossible to induce them to adopt ten dollars, or fifty-four francs, as the lowest denomination of their notes; whereas, in the United Kingdom, the lowest Bank of England note is for five pounds, and the circulation of small notes in Scotland and Ireland is extremely limited. According to this calculation, the United States, to judge from the quantity of gold coined there since the discovery of the Californian mines, must already be supplied with at least one half of the stock of that metal which is required, at its present value; and we exaggerate somewhat in supposing that, to complete their metallic circulation, they may still require 150,000 kilogrammes of gold. That amount of coin would represent 500 millions of francs, or twenty millions sterling. As regards Russia, we may presume that she is still nearer repletion, since, during many years, the Russian Government has coined, and deposited in the vaults of the fortress of St. Peter and St. Paul, at Petersburg, a large portion of the gold produced by their own mines, in order that it may serve as security for the paper money which circulates throughout that empire, and answers all the purposes of trade. We will allow a wide margin, and estimate her additional

wants at 150,000 kilogrammes of gold. As for Turkey, without decrying that country, and while paying a due tribute of respect to some of her statesmen who are striving to regenerate its institutions, we must add, with regret, that their progress is slow, and the quantity of gold which that country seems destined to absorb, both for coinage and other wants, appears likely to be very insignificant for a long time to come.

"Unquestionably there are countries where civilization, but recently introduced, is rapidly spreading. Striking examples of this are presented by Australia and her dependencies, as well as by California, Oregon, and several regions of Central America. Of these countries, some will coin gold, and perhaps employ gold exclusively; or, which comes to the same thing, they will receive back from Europe, in the shape of coined money, for the transaction of current business, a fraction of the gold transmitted thence in bars or dust. As regards Australia,* at least, there can be no doubt on the subject. But we shall exceed all the bounds of possibility, if we suppose, for the sake of argument, (what does appear to me to be a great exaggeration,) that, during the next ten years, these countries and Turkey, together, may absorb, for their metallic circulation, gold to the extent of one milliard of francs, (forty millions sterling,) or about 300,000 kilogrammes."

pp. 38 - 42.

With respect to the consumption of gold in gilding and the arts, M. Chevalier finds reason to believe that it is trifling indeed, when compared with the anticipated increase in the production of the metal. Gold leaf is so thin that a pound of it will cover a very large surface; and in the manufacture of lace, as the coating is but one twelfth part as thick as gold leaf, it is found that a piece of gold which is now worth only sixty-five cents will suffice to gild a wire 2,187 yards long. The trinkets and other articles manufactured of gold are usually very light, and the demand even for these is inconsiderable. Jewellers and goldsmiths often remelt old trinkets and coins, not more than half of the metal which they consume being new or unworked. The official returns of the *bureaux de garantie* in France, for the last eleven years, show that the average quantity of gold work annually tested and stamped in that country has not exceeded 5,000 kilogrammes, or about

* It is estimated that, up to the present time, (November, 1852,) Australia has imported from England four millions sterling, in sovereigns. As much more is now on its way out.

£680,000. Corresponding official returns of the gold plate annually manufactured in England, on which duty was paid, show that the average did not exceed 7,000 ounces troy, or about £27,020. Watch-cases, however, and a number of other articles, are exempt from duty, though they would be subject to it in France; and it is probable, also, that a considerable quantity of gold is surreptitiously manufactured and exported to escape the duty. But the quantity on which duty is paid probably maintains about the same proportion to the whole quantity; and the returns of the former quantity for the last fifty years prove that there has been but very little increase in the demand for such articles, notwithstanding the great increase of wealth and of population.

"In England, luxury is assuming the same features as in France. It is less extravagant. People are becoming more economical. The wealthy even calculate more, and spend less for ostentation. True, as Mr. Porter remarks, we now find in the houses of workmen, artisans, and the other lower classes of society, utensils and articles made of the precious metals, which were not formerly to be seen there. Occasionally we meet with silver cups, and sometimes even with articles of silver gilt, and very generally with silver spoons. In the generality of taverns, silver forks have replaced steel ones. *Still, on the whole, the total quantity of silver employed in the manufacture of articles of luxury, is rather diminishing than increasing.* As for gold, its consumption has only begun to rise within the last few years. *No year subsequent to* 1830 *has ever reached the figure of* 1826, *which was* 8,405 *ounces.* pp. 47 – 48.

On the whole, in view of the data already given, and of the fact that the principal manufacture of gold is in England and France, and that at least half of the metal is obtained for this purpose by melting up old articles, we are rather surprised that M. Chevalier allows so large an amount as 20,000 grammes, (£2,720,000,) to "represent the average quantity of new gold which is likely to be annually absorbed by the goldsmiths during the next ten years, on the presumption that gold shall retain its present value." But even this large amount is less than ten per cent. of the present annual product of the metal. Our author makes allowance, with equal liberality, for the other countervailing forces which tend to maintain gold at its present value; and still finds that a surplus of at least 120

millions sterling must be accumulated within the next ten years, the whole effect of which will be felt in diminishing the present relative value of gold to other articles.

"It may be asked, in what way will the fall in the value of the precious metals manifest itself? We might reply, in general terms, that any commodity which is offered pretty continuously in quantities which exceed the demand, must, from that very circumstance, decline in value, and that its fall must continue, if the cost of production be less than it previously was. We will, however, enter into some details on this point, or, at least, cite some examples of the mode in which the redundant production affects the value of the precious metals, and depresses it. When the Spanish colonists of Mexico and Peru had extracted from the mines a considerable quantity of gold and silver, they sent extensive orders to their mother country for such articles as suited their wants and tastes. These extensive orders enhanced the price of these articles at home, and there was no reaction from that higher range of prices, (except occasionally from transient fluctuations of the colonial markets); for the quantities of the precious metals shipped homewards by the colonists did not diminish, but, on the contrary, went on increasing. Again, the inhabitants of the Spanish peninsula, into whose possession the silver and gold passed on very profitable terms, exercised, in their turn, a like vivifying influence on trade in general. By the demand they thus created for articles of consumption, for raw produce destined to be worked up, and for labor, they raised the market price of these articles of consumption, of raw produce, and of money wages of all kinds. Now, to say that the price of a thing has risen, is tantamount to saying that the value of the precious metal which constitutes that price has fallen. At the present hour, as regards the gold imported from California and Australia, the rationale is susceptible of still easier illustration. It is unquestionable that England receives, by the vessels arriving from the above countries, a large portion of that gold, the bulk of which, we know for a fact, finds its way into the vaults of the Bank of England. Accordingly, the stock of bullion of that institution, which used formerly to range from 8 to 9,000,000 sterling, now exceeds 21,000,000. With the view of turning this stock of bullion to account, that Bank has lowered its minimum rate of discount by degrees from three to two and a half, and even two, per cent. The reduction of the rate of discount encourages industrial enterprise, and especially stimulates speculation, which again has a tendency to raise the price of goods. Hence a variety of articles have already experienced a rise which, in process of time, must gradually

spread to all others. Now, in a country where the standard is gold, what else is a general rise of prices but a fall in the value of gold in relation to commodities in general?

"The aim of the Bank of England at present, and of the holders of the precious metals at all times, is to put into circulation the gold or silver in their coffers; but the coin which circulates in a country has natural limits, provided the metal or metals of which it is composed remain unchanged in value. The metallic circulation, practically, bears a certain proportion to the mass of business transacted. All beyond that is redundant, and the current of business throws it back into its natural reservoirs, which, in our days, are the public banks. A fall in the value of the precious metals is the only means by which the augmented mass of them can remain permanently in circulation. And this problem is now about to be solved, before our eyes. Suppose the mass of business transactions to be twenty milliards, and the coin required, therefore, to be only one tenth of that sum; any greater quantity of coin you may put into circulation will not possess, in relation to the mass of exchangeable commodities, a higher value than that now possessed by the two milliards of coin. In vain will you add one half to the circulation, and increase it from two to three milliards, — that is to say, if the coin be silver, from nine million kilogrammes to thirteen and a half million kilogrammes; your thirteen and a half million kilogrammes will only command, in commodities of every kind, the same quantity as was formerly exchanged for nine million kilogrammes. Let us imagine, for example, that, some morning, every housewife, on her way to market, at Paris, were to find in her purse three, instead of the two, five franc pieces with which she had supplied herself for the morning's purchases, and that she proceeded to market resolved to expend the whole; that all of them acted in this respect alike, *and that they found at the market only the usual supply of vegetables and other provisions;* her three pieces would go no farther than the two would have gone; she would be obliged to pay for every thing one half more than usual; and, after having laid out the entire fifteen francs, she would return home with precisely the same quantity of provisions as if no addition had been made to her purse. This familiar illustration conveys a tolerably correct idea of the effect produced when fresh and copious supplies of the precious metals augment the quantity of coin in circulation.

"We must, however, add, that, concurrently with the above phenomenon, another is elicited by the discovery of rich mines and gold fields. A stimulus is thereby given to enterprise, industry, and trade, as we explained when speaking of the effects produced by the supplies drawn

from the mines of America, after the discovery of that continent, and of the gold now flowing into the Bank of England from California and Australia. Under such circumstances, the metallic currency tends to expand, without the value of the precious metal being affected by that expansion, *because it is the result of enlarged business transactions. The two phenomena present countervailing forces, but the latter, though it may delay, cannot neutralize the much stronger and permanent effects of the former phenomenon. The depreciation of the precious metals may be checked, in consequence of the enhanced demand counteracting, to some extent, the augmented supply; but the final result, supposing the production to prove permanent, is nevertheless certain. The value of the precious metals, as compared with that of other commodities, must ultimately depend on the relative cost of production.*" pp. 57 – 61.

Is it probable that the gold-fields of California and Australia, rich as they are at present, will be exhausted before they have produced any material effect on the value of the precious metals? It is admitted, on all hands, that "placers," or gold-deposits, are generally of an alluvial character, and are therefore sooner exhausted than silver, lead, or copper mines. The process of collecting gold, from a larger or smaller extent of surface, is altogether unlike that of following a single vein of silver far into the rock and the bowels of the earth; the latter enterprise, under favorable indications, may be pursued to an unlimited extent and for an unlimited period. Only a given number of workmen, however, depending on the thickness of the vein, can be profitably employed upon it at one time. But as gold exists only in a stratum of no great thickness, either at the surface or near the surface of the earth, any number of persons can work side by side, without interfering with each other's operations; and as soon as a given surface has been dug over, and carefully examined, the product of that spot is exhausted, and nothing remains but to hunt up new localities. It has frequently happened, therefore, that gold-fields of extraordinary promise have been worked to exhaustion without producing any perceptible effect on the bullion market. "Colonel Acosta, in his history of the discovery of New Grenada, adduces several examples of this kind." Notwithstanding the great amount of gold already collected from them, we cannot say positively that the auriferous districts of

Russia, California, and Australia are not of this character. But the evidence all seems to point the other way; in each case, new localities have been found with little difficulty, after those which were first worked had been exhausted. The absolute gains of each miner may be, even now, less than they were at first; but from the greater number of hands employed, the total product is greater. Chevalier's opinion is expressed very decisively on this point.

"The condition of a vast superficies appears to us to be completely fulfilled by the fields which are now being worked. There are an immense number of square myriametres of auriferous soil in California. There is also a vast tract of similar rich soil in the Mexican province of the Sonora, which adjoins California, and which is still all but virgin. It can no longer be doubted, that, in Australia, the gold-fields are of boundless extent; there is even ground for believing that they are much vaster than those of California. In Russia, the auriferous zone extends over an immense surface. There, the gold veins are scattered at intervals, in a line which extends from Kamskatka and the Oudskoi mountains, the feet of which are bathed by the waters of the Pacific Ocean, to the latitude of Perm, that is to say, to the western extremity of the Oural Chain, and that immense auriferous zone is 900 kilometres wide. To adopt the words of M. de Humboldt, the presence of gold nearly continuously throughout that immense tract is one of the most striking phenomena which can be indicated on the globe." pp. 63, 64.

Our author also finds reason to believe, though we do not share his anticipations, that "the process of quartz crushing will yield a large quantity of gold," in addition to that which is washed and sifted out of the soil. Certainly, the quartz was the original matrix of the gold, which can still be found in it, that which is now scattered over alluvial or diluvial tracts having been rubbed or ground out of the rock by the various disintegrating processes of nature through past ages. But the attempts which have thus far been made to obtain the metal from quartz, crushed by powerful stamping machinery, have been signal failures. The rock is too stubborn, and the quantity of gold in it too uncertain, to allow the operation to be pursued with profit. Time enough has also elapsed since this process was first suggested to allow it a fair trial.

When the gold-fields are exhausted, people may try crushing the gold-rock again.

M. Chevalier enters into a cursory examination of the question, whether the whole decline in the value of money will be indicated by the variation in the relative values of gold and silver. As we expected, he answers this question decidedly in the negative. The annual product of silver is increasing, as well as that of gold, though not so rapidly. Humboldt declared, forty years ago, that the mines of New Spain contained silver enough to deluge the world. A recent observer, M. Dupont, who has lately published an excellent work on the production of the precious metals in Mexico, adopts the views of Humboldt, and adduces a considerable amount of additional testimony in confirmation of them. He describes several formations of rock, in which silver is almost sure to be found, and says, that, although these formations are rare in the neighborhood of the city of Mexico, as we travel farther north they become of frequent occurrence, and, on crossing the principal chain of mountains towards the Gulf of California, the whole western slope of the Sonora Cordillera is composed of them. Improved methods of mining, also, have produced great results in some of the old localities, where the work had been given up for years, under the belief that it could not be continued with profit. Thus, the Frasnillo mine, which now yields silver to the amount of two millions of dollars annually, was described by Mr. Ward, the traveller, in 1827, as an abandoned property, on which no hopes could be founded for the future. From another locality in Zacatecas, which was thought to be exhausted towards the close of the last century, " there was extracted, between the years 1827 and 1839, about 150 million francs' worth of silver." If an efficient government and a race of energetic immigrants should ever be introduced into Mexico, a revolution would take place in silver-mining, and a fall in the price of silver would then be inevitable. Meanwhile, the annual product of Mexican silver has been considerably enlarged within the last ten years, and the Chilian mines have also been worked to greater advantage.

The depreciation of gold, moreover, has somewhat affected the value of silver, by throwing a large quantity of it out of

use as coin, and thereby glutting the market with it to some extent for manufacturing purposes. Till within a few years, the metallic currency of the United States was composed in great part of silver, the bank reserves of specie being chiefly in that metal. The currency of France, also, which was almost exclusively metallic, consisted mainly of silver coin. The influx of gold has changed all this, the greater part of the silver coin having left these two countries, and gone abroad in search of a better market. Of course, its value abroad was thereby somewhat diminished; and this effect would have been still more marked, if Holland had not adopted just the opposite policy, and "demonitized" gold, in order to keep the silver at home, Spain and Belgium also partially adopting the same course.

It is probable that the value of silver is a little depreciated already, and a still greater fall is in prospect, though there will be a great apparent rise in its value, when compared with gold. We must not imagine, however, that the absolute value, or purchasing power, of silver will be directly enhanced by the depreciation of gold. Silver will command more gold, but not a larger amount of commodities in general. Mr. Campbell states the principle correctly when he says, that "the working or the abandonment of the silver mines will depend entirely on the cost of extraction, and on the value of the produce extracted, quite irrespective of the supply and value of gold." The variation in the relative value of the two metals will still afford a measure, though an imperfect one, of the decline in the value of money. If regard be not had to the considerations which we have stated, the variation will lead us to underrate this decline.

The fluctuations of the bullion market, especially in the price of silver, during the last three years, have been so irregular that it seems, at first sight, difficult to account for them by the operation of a single cause tending constantly in one direction. But the irregularity may be easily explained with the aid of the facts and principles just mentioned. Two years ago, silver suddenly rose to a considerable premium, from the combined effect of the increased supply of gold, and the demand for silver coin in Holland and Belgium, where the

authorities were endeavoring to "demonitize" gold. But the speculators overrated the importance of the former cause, or rather, they did not make allowance enough for the slowness of its operation; so that the rise was excessive. Then, as the demand for silver coin in the Low Countries was soon satisfied, and, as fast as gold was poured into France and the United States, silver coin was pushed out of them, and had to seek a market in other lands, the price of silver fell again, and many persons began to think that there had been an unfounded panic, and that the influx of gold, after all, was not to affect the value of money. They were soon undeceived. Australia came to the aid of California, gold steadily fell in value, silver rose to a premium again, and to so high a premium that serious inconvenience began to be felt, especially in this country, from the want of small coin for change. Congress tardily came to the rescue, and, after much urging from the very persons who had formerly resisted the measure, passed the bill which, recognizing the depreciation that had taken place in spite of them, diminished the quantity of silver in our small coins nearly seven per cent. This remedy is effectual *for the present;* but the operation must soon be repeated. The *nominal* value of the coin, as established by this law, is not more than three or four per cent. above its present *real* value; and the influx of gold will soon reverse this inequality. Vaticination is hazardous, especially in financial matters; but we will venture to prophesy with great positiveness, that, within three years, the scarcity of silver coin will again be a subject of complaint, and Congress will be again urged to pass a law to diminish still more the amount of silver which now passes for a dollar. When the next reduction is made, we trust it will equal at least ten per cent., so as to obviate the necessity of again altering the standard for some years.

Some persons, who are not much acquainted with the subject, cry out that this is tampering with the currency; that the law just enacted only reverses the operation, and undoes the work, of the Gold Bill of 1834; whence they infer, either that any legislation upon the subject is improper, or that silver should be made the exclusive standard, and, the present weight of the silver dollar remaining fixed, gold should be

used only as merchandise, and sold by the ounce at what may happen to be its market value. It is true that the effect of the Act of 1834 was to lower the nominal value of silver in comparison with gold, while that of the recent law is to raise it; and other changes also are in prospect, which will render necessary further alterations in the coin. But legislators are not to blame for these frequent modifications, which proceed from causes that are beyond their control. The origin of the difficulty is to be found in the fact that this country has a *double* standard, — that both gold and silver are used as currency, and that every man consequently enjoys by law, and, in this country, always has enjoyed, the option whether he will pay his debts in coin of one metal or the other. But we cannot fix by law the relative value of these two metals, which is constantly changing, and, under anomalous circumstances, as at present, may change very rapidly. We might as well enact a law, that no more rain should fall in May than in April, as that silver should never vary its proportionate value to gold. The rain will fall, and the value will alter, in spite of us. After a *double* standard has once been adopted, the most that legislation can do is to follow the variations of relative value, and change the quantity of metal in the gold coins or the silver coins, so that the *nominal* valuation shall always coincide with, or approximate to, the *real* one. If this is not done, after a change has taken place in the market, the metal which is undervalued in the coinage will be driven out of circulation. Before 1834, the law required that 24.75 grains of pure gold should be deemed an equivalent for 371.25 grains of pure silver, — either of these, in the shape of coin, being legal tender for a dollar. It was found that the gold was thus undervalued, and this metal, therefore, disappeared from the currency; whatever gold coins were issued from the mint were melted up or sent out of the country. To remedy this evil, Congress altered the law in 1834, and ordained that only 23.2 grains of pure gold should be exchanged for 371.25 grains of pure silver. For a while, this remedy was effectual, and the gold and silver coins circulated side by side, till the influx of California gold disturbed the market. It was then found that the silver coin was undervalued, and it was sent out of the country to so great an

extent that the community were subjected to great inconvenience from the want of small coins for change. Congress has now again stepped forward, and ordered that 23.2 grains of pure gold shall pass for only 345.6 grains of pure silver; adding a very proper proviso, however, that, as silver has not yet risen to this point of relative value, silver coin shall not be legal tender for more than five dollars. They have thus legislated not only for the necessities of the present moment, but to some extent for the future. The recent Act, therefore, does not vary *in principle* from the Act of 1834; the object, in both cases, was to make the respective weights of the gold and the silver dollar correspond to the values of the two metals in the market. The principle is the same, though the operation of it is now turned the other way.

Those who are in favor of making silver the exclusive standard, really insist upon depriving debtors of a privilege now secured to them by law, and which is implied in every contract—namely, of discharging a debt by paying a gold eagle containing 232 grains of pure gold for every ten dollars which they owe; these persons would force them to pay 250 or 260, perhaps 300, grains of such gold, or their equivalent, for every ten dollars: — an operation very pleasant to the creditor, no doubt, but to which he cannot show the shadow of a claim, either in law or equity. On this point, we are happy to find that M. Chevalier's opinion fully coincides with our own, as appears from a portion of the following extract.

"The depreciation of gold must, in England, where it is the sole standard of value, injuriously affect the recipients of annuities, and of all fixed or deferred payments, and benefit, *pro tanto*, those who have undertaken to provide for them. Let us suppose, for the sake of illustration, that gold should fall to half its present value, in consequence of the influx of the Californian and Australian supplies. It is a supposition which may probably be realized, ere many years. In that case, the interest of the national debt, which amounts to about twenty-eight millions sterling, per annum, would not then press more upon the tax-paying public, than half the amount, or fourteen millions, do at present. The difference of fourteen millions is nearly equal to the entire annual expenditure of Great Britain for her land and sea forces. Such an alleviation of the burdens of taxation would be an immense boon to the community at large, at the expense, however, of the fund-

holder. Yet, the latter could not, with justice, complain that the laws of equity were violated by such treatment of him. The public creditor would merely be incurring the clear and simple application of the law, such as it was passed after grave and conscientious deliberation. *By law, as in equity, the Government is bound to do nothing more than to provide, every year, twenty-eight millions sterling; or, in other terms, twenty-eight million times* 113 *grains Troy, of fine gold, which is equal to* 549,314 *pounds Troy;* to be divided, *pro rata,* among the holders of stock. Had the value of gold risen to such an extent, that the quarter of wheat, which is usually worth fifty shillings, could command, on an average of fifteen or twenty years, only twenty-five shillings, or that a laboring man could only earn, on an average, two shillings a day, instead of four shillings, the Chancellor of the Exchequer would nevertheless have been bound to provide annually the stipulated 549,314 pounds Troy, of fine gold, for *pro rata* distribution among the public creditors. *The two contracting parties, it is plain, ran converse risks; the State, that of an enhancement of the value of gold, the fund-holders, that of its depreciation.* If ever our conjecture be realized, the wheel of fortune will have favored the British treasury. The other party must submit, and will have no right to complain." pp. 73–75.

We have already borrowed so liberally from M. Chevalier's instructive pages, that we can find room but for one extract more, — the following brief sketch of the manner in which different kinds of property will be affected by the depreciation of gold.

"As a general rule, whenever the value of the metal which forms the standard coin is falling, he who lays out money for a long term of years ought to avoid what are termed *cash,* and select *real,* investments. The public funds are of the former category; so, also, are mortgage bonds, bank stock, and the loans raised by railways, canals, and other public companies. True, £100, invested in consols, will still be worth that amount, provided the political and other causes, which influence the price of the funds, have produced no fluctuation.

"But if gold becomes depreciated, £100 will command a smaller quantity of land, real property, and commodities in general; for precisely in proportion as that metal declines, other articles advance in price. The rise of the latter is correlative with the fall of the former, or rather they are two features of the same fact.

"The shares * in railways, canals, bridges, docks, and other similar

* Railway *debentures* [bonds], on the contrary, being cash securities, must deteriorate as gold becomes depreciated.

public undertakings, rank in the category of *real* property; were the currency to fall fifty per cent., the market price of railway shares would double itself, on the supposition that no change for better or worse occurred to the lines, that the traffic remained the same, *and the Companies had the power of proportionally raising* (viz., doubling) *their tariffs.*

"In every case, where a railway or other public company already exacts the maximum rate of charge authorized by Act of Parliament, (unless Parliament should raise the tariff,) the value of the shares must decline; inasmuch as the traffic receipts will remain stationary, while the working expenses will be doubled. It may even come to pass, on certain lines, that the receipts will not cover the cost of working. Without fresh powers from Parliament, the shares would become worthless, and the lines would either be abandoned or ceded to the state." pp. 83-85.

ART. X. — CRITICAL NOTICES.

1. *Heaven, and its Scriptural Emblems.* By Rev. RUFUS W. CLARK. Boston: John P. Jewett & Co. 1853. 12mo. pp. 269.

THIS book is well worthy of its attractive title, its beautiful typography, and its rich artistical adornment. The subject belongs not to a sect, but to catholic Christianity; and the author has treated it, not with the narrowness of a partisan, but with the freedom and largeness of spirit which must insure him admiring and edified readers from every portion of the Church. By this, we do not mean to say that he has suppressed all traces of his peculiar opinions in theology; but he has left them in that background in which they fittingly belong, when the Paradise, open to all the good of every name, is the subject of discourse. The volume contains two essays which may properly be termed argumentative, namely, on the "Evidences of a Future Life," and the "Recognition of Friends." The former is a limitless subject in one aspect, while, in another, it may be compressed into a single sentence. As to the proofs of human immortality, aside from revelation, — in the feebleness of single arguments taken separately, and in the multitude of analogies, types, and foreshinings, all more or less noteworthy in making up a cumulative argument, — the task of selection and arrangement is difficult, and it is no small praise that, in the present